AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of forming electrically conductive pathways for radio frequency tags, comprising the steps of:

providing a thermal transfer ribbon;

moving the thermal transfer ribbon past a heat source;

engaging the thermal transfer ribbon with a flexible receiver substrate as the thermal transfer ribbon moves past the heat source;

using paper or pliable film as the receiver substrate;

selectively heating portions of the thermal transfer ribbon with the heat source; ~~and~~

transferring a composition from the thermal transfer ribbon to the receiver substrate, the selective heating enabling a desired pattern of the composition to be transferred to the paper or film receiver substrate, the composition transferred from the thermal transfer ribbon being an electrically conductive material~~.~~; and

electrically connecting said composition on said receiver substrate to a microchip to form an antenna for a radio frequency tag.

2. (Cancelled)

3. (Currently Amended) The method of forming electrically conductive pathways for radio frequency tags as recited in claim 1, wherein the composition transferred from the thermal transfer ribbon is an electrical conductor precursor which is non conductive before heating which becomes an electrically conductive material upon application of heat from the heat source.

4. (Previously Presented) The method of forming electrically conductive pathways for radio frequency tags as recited in claim 1, further comprising the step of using a thermal print head as the heat source.

5. (Previously Presented) The method of forming electrically conductive pathways for radio frequency tags as recited in claim 1, wherein the thermal transfer ribbon fails to have magnetic particles and wherein transfer of the composition occurs solely due to heating and contact of the composition with the receiver substrate.

6. (Cancelled)

7. (Currently Amended) The method of forming electrically conductive pathways for radio frequency tags as recited in claim ~~6~~

1, wherein the antenna is used as the radio frequency identification tag and further comprising the step of affixing the microchip to the receiver substrate either before or after the step of transferring the composition.

8. (Cancelled)

9. (Previously Presented) The method of forming electrically conductive pathways for radio frequency tags as recited in claim 1, further comprising the steps of:

using a polymeric film or paper as the transfer ribbon;

coating the transfer ribbon with the conductive material and with at least one of wax, binders, surfactants and dispersants; and

using at least one of metallic inks, metallic substances, metallic dispersions, metallic salts, carbon based inks as the composition.

10. (Previously Presented) The method of forming electrically conductive pathways for radio frequency tags as recited in claim 9, further comprising the steps of:

using at least one of carnuaba wax, paraffin wax, low molecular weight polyethylene wax as the wax in the transfer ribbon; and

using at least one of styrene copolymers, polyethylene resin, polystyrene, vinyl chloride polymers, and vinyl acetate polymers as the binders in the transfer ribbon.

11-24. (Cancelled)

25. (Cancelled)

26. (Previously Presented) The method of forming electrically conductive pathways for radio frequency tags as recited in claim 1, further comprising the step of using at least one of sorbitol copper formate, copper sulfate, cuprite, tenorite and silver nitrate as reactive material which forms the electrically conductive material.

27. (New) The method of forming electrically conductive pathways for radio frequency tags as recited in claim 1, wherein said microchip is attached to the receiver substrate before transferring the composition.

28. (New) The method of forming electrically conductive pathways for radio frequency tags as recited in claim 1, wherein

said microchip is attached to the receiver substrate after transferring the composition.

29. (New) A method of forming electrically conductive pathways for radio frequency tags, comprising the steps of:

providing a thermal transfer ribbon including a precursor which is nonconductive;

moving the thermal transfer ribbon past a heat source;

engaging the thermal transfer ribbon with a flexible receiver substrate as the thermal transfer ribbon moves past the heat source;

using paper or pliable film as the receiver substrate;

selectively heating portions of the thermal transfer ribbon with the heat source to activate said nonconductive precursor to form an electrically conductive material; and

transferring a composition from the thermal transfer ribbon to the receiver substrate, the selective heating enabling a desired pattern of the composition to be transferred to the paper or film receiver substrate, the composition transferred from the thermal transfer ribbon being an electrically conductive material.